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United States Department of Agriculture

Forest Service

Northern Region

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Fact Sheet on 1979

PRESCRIBED FIRES in the Northern Region

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In Region 1 of the U.S. Forest Service, 1979 was a dramatic and controversial test year for fire management. The concept of allowing some fires to burn unsuppressed in predetermined areas under tightly managed conditions underwent tough public and political scrutiny. It had been 6 years since the 1,200-acre Fritz Creek prescription fire in the White Cap drainage of the Selway-Bitterroot Wilderness had tested land manager's abilities to write fire prescriptions for various parcels of land and to match these prescriptions to the land management objective. It had been 3 years since a Final Environmental Statement entitled "Fire Management in the Selway-Bitterroot Wilderness - A Proposed Policy Change" had been approved, clearing a scientific and administrative path for other Forests to formulate their fire plans.

By June 1979, fire management plans had been written and approved for eight percent of all lands administered by Region 1. The Lolo and Bitterroot National Forests and the Troy District of the Kootenai National Forest had comprehensive fire plans with prescriptions specifically tailored to integrate fire into land use planning. Of the 4,600,000 acres administered as either Wilderness or Primitive Area in the Region, 30 percent was being managed to allow some lightning fires to more nearly play their role in "shaping, maintaining, and directing the dynamics of natural systems". (See Table 1)

As the 1979 season developed and prescribed fires such as Independence, Barefoot-Peach and Smith Mountain received more attention in the national and local media, penetrating questions were asked. Private citizens and a few politicians questioned the soundness of the prescribed fire policy (this policy was commonly known as the "let burn" policy).

This "fact sheet" is a partial answer to some of the more basic questions asked. Generally, it will show that fire managers did not randomly allow all new starts to burn; a majority of new ignitions within fire management areas were suppressed. The facts will also point out that fire managers were able to manage large fires and to keep these fires within perimeters dictated by the manager. The facts will also show that of the 30,000 gross acres affected by prescribed fires in 1979, less than 30 percent of those acres were burned by high intensity stand replacement fire.

Table 1.--Approved fire management areas, 1979.

National Forest	Name of Area	Acres		
		Wilderness	Nonwilderness	Total
Bitterroot	Selway-Bitterroot Wilderness	203,590		203,590
Bitterroot	High elevation, light fuels	68,960	8,840	77,800
Bitterroot	Intermingled ownership - high resource value zone		433,080	433,080
Bitterroot	Camp-Tolan		39,848	39,848
Clearwater	Selway-Bitterroot Wilderness	265,779		265,779
Deerlodge Beaverhead Bitterroot	Anaconda-Pintler Wilderness	44,175 72,537 41,162		157,874
Kootenai	Troy Ranger District	15,365	309,272	324,637
Lolo		48,325	261,461	950,202
	Modified dispatch		640,416	
Nezperce	Selway-Bitterroot Wilderness	559,512		559,512
Total acres		1,319,405	1,692,917	3,012,322

Table 2.--Prescribed fire summary, 1979 fire season.

National Forest	Fire Starts	Fires Suppressed	Fires Allowed to Burn	Acres Burned
		Number		
NONWILDERNESS				
Bitterroot	4	4	-	-
Kootenai	19	18	1	542
Lolo	6	5	1	-
Nonwilderness subtotal	29	27	2	542
WILDERNESS				
Bitterroot	16	7	9	14,940
Clearwater	11	7	4	75
Kootenai	2	-	2	5
Nezperce	61	49	12	16,315
Beaverhead	1	1	-	1
Bitterroot	1	1	-	-
Deerlodge (Anaconda Pintler)	-	-	-	-
Wilderness subtotal	92	65	27	31,336
TOTAL	121	92	29	31,878

Table 3.--Potential prescribed fires suppressed in Northern Region and primary reason for suppression.

National Forest	Fires Suppressed	ERC OUTSIDE PRESCRIPTION	MAN-CAUSED	REGIONAL PREPAREDNESS	RF'S BAN ON NEW STARTS 1/	SMOKE MANAGEMENT	FOREST OR DIST. FIRE LOAD	NEAR MANAGEMENT BOUNDARY	FIRE LOAD WITHIN MANAGEMENT AREAS	PROPERTY	PUBLIC SAFETY
Bitterroot	11	7						2			2
Clearwater	7			1	1	1		2	1	1	
Kootenai	18	18									
Lolo	5	5									
Nezperce	49		4		1			7	36	1	
Beaverhead	1			1							
Bitterroot	1				1						
Deerlodge (Anaconda Pintler)											

1/ On August 10, 1979, Regional Forester Tom Coston stated that "all new starts will be suppressed immediately." The main rationale for his decision was the limited and strained firefighting resources available in the West. This ban on new starts was lifted on August 27 after rain raised fuel moistures and lowered the fire danger.

Table 4.--Prescribed fires allowed to burn in Region 1.

Forest and Name of Fire	Date Reported 1979	Duration of Burn Days	Fuel Conditions	Fire Size Acres
Bitterroot 2/				
Barefoot	7/3	106 1/		4,200
White Cap	7/6	2	North slope/brushy	SPOT
Mt. George	7/6	1	Rocks	SPOT
Slide Creek 2/	7/6	2 1/	Alpine high country	SPOT
Peach Creek 2/	7/6	103 1/		10,700
Koch Mt. #1	7/7	3		SPOT
Koch Mt. #2	7/19	1	Rock ledge - one log	SPOT
Little West Fork	8/30	2	High elevation alpine	SPOT
Saddle Gulch	9/4	43	High elevation alpine	40
Clearwater				
Lower Dead Elk	7/27	2	Subalpine fir menziesia	SPOT
Upper Dead Elk	7/27	27	Subalpine fir menziesia	75
Big Sand Creek	7/30	2	Light smoke volume in light fuels	SPOT
Stanley Butte	8/30	2	Creeping ground fire	SPOT
Kootenai				
Taylor Peak	6/1	3 1/	Snag on rock outcrop	SPOT
Smith Mountain	6/12	140 1/	Light to moderate fuels	542
Doonan Peak	7/27	35	Burned uphill through rock field in mountain larch and subalpine fir	5
Lolo				
14 Mile	4/30	1		SPOT
Nezperce				
Independence	7/3	106 1/		16,300
Legend Lake	7/4	All of these fires burned for 10 days or less.	Fuels lodgepole and bear grass	SPOT
Three Links #1	7/5		Snag on rock cliff	SPOT
Three Links #2	7/5		Snag surrounded by snow	SPOT
Grotto Creek	7/5		Ignited fuel in swampy area	SPOT
Lizard Lake	7/5		Burning on talus slope	SPOT
Rhoda Point #1	7/6		Fuels grand fir and lodgepole	SPOT
Rhoda Point #2	7/6		Fuels in "green-up" stage	SPOT
Fawn Lake	8/28		Rain put fire out	SPOT
Wahoo	9/4	43 1/	Fuel subalpine fir	15
Cub Lake	8/23		Fuel subalpine fir	SPOT
Two Lakes	8/17		Fuel subalpine fir	SPOT

1/ Fires still burning as of 10/17/79
2/ Fires burned together 8/4/79

Table 5.--Fire behavior effects of Region 1 prescribed fires (1979) 50 acres or larger.

Fire Name & Forest	Area Within Burn Perimeter	Crown Scorch & Crown Fire	Ground Fire 1/	Comments on Fire Behavior
	Acres	Acres	Acres	
Upper Dead Elk Clearwater NF (Wilderness)	75	60	15	Fire made no dramatic runs. Burned along down/dead logs. Torching out of subalpine fir causing numerous spot fires.
Barefoot Bitterroot NF (Wilderness)	4,200	600 - 1,200	3,000 - 3,600	Basically south slope fire. Much perimeter growth due to rolling material rather than forward rate of spread.
Peach Bitterroot NF (Wilderness)	10,700	2,000 - 5,600	5,000 - 8,700	Fire spread into Canyon Creek by long range spotting. Peach Creek originally ignited and spread on north slopes.
Independence Nezperce NF (Wilderness)	16,300	3,000 - 4,000	12,300 - 13,300	Made no dramatic runs. Basically a low intensity ground fire with occasional higher intensities associated with heavier fuel cells. In early August, fire backed down north slopes and burned rapidly up south exposures.
Smith Mountain Kootenai NF (Nonwilderness)	542	82	460	Fire reburned a 40-acre section; made numerous runs between 3:00 - 6:00 p.m.

Burned together 8/4/79

1/ The acreages listed here are estimates. It is difficult to distinguish a tree killed by crown fire from a tree killed by radiant heat from a surface fire. It is assumed that stands of timber affected by either crown scorch or crown fire will be replaced by a new stand. A ground fire kills only isolated members of a timber stand.

Table 6.--Person days on fire for monitoring and limited suppression and approximate cost of managing fire.

Name of Fire and Forest	Person Days Monitoring Fire	Person Days Limited Suppression	Type of Limited Suppression	Approximate Total Cost to Manage Fire
Upper Dead Elk Clearwater NF	2 days FBO on fire; 20+ days Forest Air Patrol; 5+ hours 206-B helicopter.	0	0	$1,500 - $3,000
Smith Mountain Kootenai NF	40 days with actual "monitors" on fire. Monitors used to collect weather-fuels and map fire.	60	Handline, a few acres burn-out, action taken to keep fire from an operational area.	$47,000
Independence Nezperce NF	60 days with monitor on fire; also monitored by Forest Air Patrol, helicopters, and lookout tower.	1,600	240 chains of handling & 220 chains burn-out. Suppression action taken to protect private property & for trail bridges. (This action accounted for 75 per cent of total cost)	$235,765
Barefoot Bitterroot NF	3 days forester trainee on fire. Forest Air Patrol main way of observing/monitoring fire. 25+ hours with 206-B helicopter.	45	3 miles of handline with minor burn-out. Action taken to keep fire from heavy fuel concentrations to reduce smoke production.	Combined total for Barefoot & Peach Fires - $28,460. Helicopter = $12,800 - fixed wing aircraft = $660 - suppression wages = $15,000
Peach Bitterroot NF	Fire observed as needed. by Forest Air Patrol. 25+ hours, 206-B helicopter.	95	1-1/2 miles of handline. Action taken to keep fire from heavy fuels to reduce smoke production. Pumps also used to protect FS trail bridge and cabin.	

Burned together 8/4/79

Table 7.--Brief synopsis of other impacts associated with larger prescribed fires in Region 1 during the 1979 fire season.

Independence Fire, Nezperce National Forest

1. Moose Creek airstrip was closed for 7 days because of cold air inversions holding smoke to the ground. Heavy volumes and densities of smoke from all fires made safe landings impossible.

2. Shearer airstrip was closed from August 5 through August 13 to private aircraft landings because of heavy FS air traffic and smoke conditions in departure patterns.

3. Moose Creek wilderness rangers verbally warned wilderness users of the presence and location of the Independence Fire and the trails they should avoid. During the fire, four trails (approximately 25 miles) were involved in this "unofficial" closure or warning.

4. Various volumes and densities of smoke were seen down the Selway River in Kooskia, Idaho.

Barefoot and Peach Fires, Bitterroot National Forest

1. Smoke obscured visibility and caused some negative public comment in the Darby-Hamilton, Montana, area from July 31 through August 12. Most of this smoke lay over these populated areas in the afternoons.

Smith Mountain Fire, Kootenai National Forest

1. Insect activity in ponderosa pine and lodgepole pine increased significantly after the fire. This activity is associated with the burned acres.

2. A 4-mile portion of the Upper South Callahan Road was closed for 2 days to protect FS firefighting equipment from vandalism.